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Phoenix  
OS/2  
Society

# extended attributes

The magazine of the OS/2 community

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Backups used to take stacks and stacks of diskettes.

Cover concept and artwork by Bill and Esther Schindler.

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## extended attributes

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## comment C'mon backup

by Bill Schindler, Editor-in-chief

It's kind of odd. During the week that we were putting together this issue, I noticed that a few people on the discussion list suddenly became deeply interested in backup and archive software. Apparently, there was a rash of flaky hard drives and trashed INI files.

And at the same time, we were putting the finishing touches on an issue of *extended attributes* focusing on backup software.

I've noticed that sort of karmic connection between the magazine and the membership before. Each time I notice it, I examine our list of upcoming themes and mull over the potential consequences.

I'll give you plenty of warning if we ever decide to do an issue on disaster recovery!

### Higher society

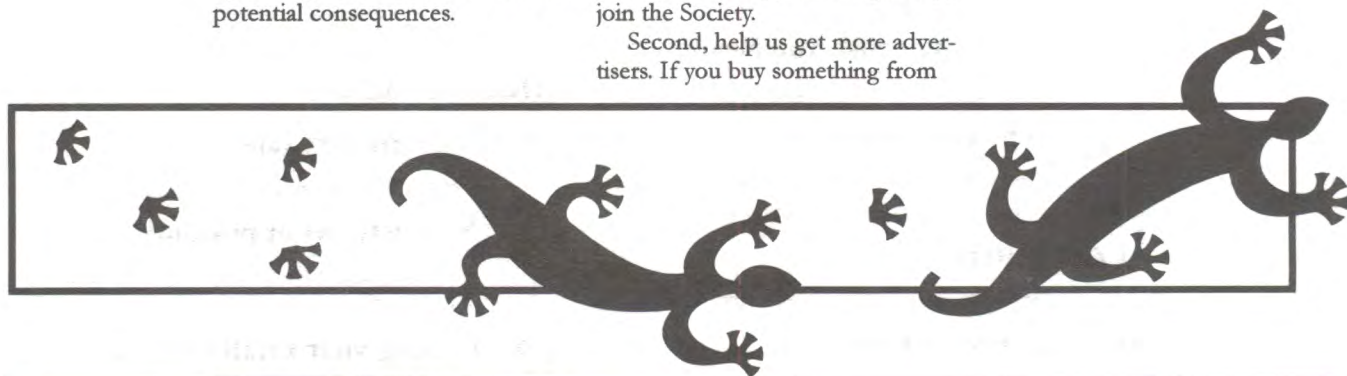
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The Phoenix OS/2 Society, Inc (POSSI) is an organization of computer users with an interest in IBM's OS/2 operating system.

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# What you resist, you become

by Esther Schindler

Years ago, an acquaintance died "temporarily" during a routine medical test. After the doctors revived him, Ron declared that the brush with death changed his life. No longer, he proclaimed, would he waste his time on earth. He was going to experience everything that he could: "I'm not going to miss anything!"

In his pursuit of "not missing anything," Ron rushed from one thing to the next—and he saw and experienced almost nothing. He was so busy "not wasting time" that he never *took* time. He didn't smell the flowers; heck, he stampeded through the flowers because he was rushing off to the next thing not-to-be-missed. Ron didn't contemplate the world around him; he never took time to enjoy a thing. Despite his sincere goal to "not miss anything," he missed *everything*.

Alas, I think this true story has some lessons for the OS/2 community as well.

## Hating Microsoft

OS/2 users have many reasons for choosing the operating system. Some people prefer the user interface, the way that they like chocolate better than vanilla. Others had OS/2 handed to them as a job requirement, and have no choice. Still others picked OS/2 because it's not from Microsoft.

Choosing OS/2 as an "anything but Microsoft" answer isn't necessarily unhealthy. Some people simply want to encourage alternative choices, the way they'll give their business to a small vendor or a beleaguered minority when all else is equal. Or they don't like Microsoft's attitudes, and want to vote with their feet (and checkbooks). But for others—we've all met them—choosing OS/2 is a way to get back at Microsoft, a revenge against the devil spawn who are secretly destroying all that is good in the world.

Forgetting that their major objection to Microsoft is the company's insistence on shoving its choices down everybody's throats, the fanatics proceed to shove their viewpoint down the gullet of anybody who'll stand still and listen. OS/2 discussion groups get cluttered with anti-Microsoft diatribes. Anybody who suggests that Microsoft might have done something right (even by accident) is accused of being a Microsoft mole.

Further, they apparently believe that OS/2 is 100% good, IBM is well intentioned and is sure to take care of us end-users as soon as they get around to it, and any hardware unsupported by OS/2 is stuff you didn't need anyway. Anybody who

“...while you were fighting a guerilla battle against the enemy in front of the castle, “your side” snuck out the back and surrendered...”

doesn't see these obvious "facts" is obviously not a true supporter of the OS. (Sure. And I am Marie of Romainia.)

Often, these fanatics are quick to slap a "Team OS/2" tag on their email signatures, and act as though they represent the rest of us. I've had to cope with such fanatics, at least indirectly, because my writer friends complain to me when they get hate mail. Too often, I've had to explain to other members of the computer press that the fanatics are no more representative of OS/2 users than is Tammy Faye Baker of the typical cosmetics industry consumer.

Meanwhile, the person who hates Microsoft and chooses OS/2 as if that preference were a weapon, becomes a tool of hate. Hate and anger make people blind; in the

frenzy of destruction, it becomes impossible to recognize your friends.

## Destroying what you love

What's painfully ironic about the fanatic's point of view is that they destroy that which they want most.

Ordinary OS/2 enthusiasts want others to know about the operating system. They want computer users to learn about OS/2's technical strengths and the benefits that result: improved efficiency, reliable tools, and so on. They want the OS/2 community to have a credible voice, so that when it says "OS/2 is good," we don't get laughed at.

Both the fanatics and extremists have always wanted OS/2 to become a success. Even if they believed it unlikely to become the dominant operating system, they wanted OS/2 to be accepted as a reasonable and unremarkable alternative. Or so they said.

Because in the "if you're not with me, you're against me" battle, the first casualty is the truth. Perspective is lost. I've seen OS/2 users whose Web sites claim bizarre and patently untrue (or at least un-provable) behavior on the part of Microsoft; they never realize that losing credibility in one area destroys their ability to be believed when it comes to OS/2's technical advantages.

## The larger community

I suppose that any community has its extremists. It's difficult for those of us who try to find intelligent, reasonable ways to accomplish our goals, when loose cannons shoot us all in the feet.

The OS/2 community has an added problem, however. The extremists were tolerated for far too long.

Polite people tend to look away when they see someone else acting poorly. We'll shift to the other side of the room and pretend the disturbance isn't happening. That works fine in "live" communities, but the

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accessibility of online tools has worked against us in this instance. The computer press gets more email from the fanatics than it does from regular people (who might criticize or question content, but don't question the writer's ancestry or moral integrity). Driver and software manufacturers are overwhelmed by accusations that they're "bought off by Microsoft," drowning out the sincere requests for OS/2 support.

Because the extremists were the loudest voices, the OS/2 community has very little credibility in the computer industry. The "real" Team OS/2 ran Installation Days, showed off OS/2 at computer fairs, and established events to celebrate the operating system. The fanatics, believing that their excesses were helping OS/2, erased all the good accomplished by the "real" Team OS/2. The more the haters hated the enemy, the more they made it impossible for "our side" to win.

### And where's IBM?

IBM hasn't helped much, in this regard. If you've ever debated whether IBM was a "market driven company" or a "marketing driven company," I can lay that argument to rest. IBM is a lawyer-driven company, and they do astoundingly stupid things because the lawyers won't permit sensible action.

Out of fear that a (real) Team OS/2 member would sue IBM if he broke his leg while demonstrating OS/2 at a computer store, IBM's lawyers declared a "hands-off" attitude towards the grass-roots organization. As a result, anybody could claim membership in Team OS/2, and nobody could throw him out for bad behavior.

Instead of IBM countering the naughty boys by deliberately emphasizing the unique strength of an active, enthusiastic user base, IBM treated Team OS/2 like a dirty secret. This was among the many "secret weapons" that IBM threw away in its OS/2 marketing (partic-

ularly during the period when the company claimed it was addressing the non-corporate community). Can you think of any similar time, in the history of the computer industry or any industry, when the users were so excited about a product that they did the marketing for the company for free? IBM didn't capitalize on this opportunity at all.

Plus, in case it hasn't become readily apparent yet, the "New IBM" is gone. When talking with the IBM executives in power, you can almost see crisp white shirts and suits underneath the polo shirt camouflage.

Unfortunately, hating IBM for its stupidities isn't any more useful than hating Microsoft; neither assists us in reaching our goals.

### Optimism is a trap, too

I don't know if it's a deliberate policy, but IBM has been remarkably closed-mouthed about its intentions regarding future client versions of OS/2. Users who love OS/2, who want to believe the best of those they care about, are happy to insert positive messages where none are to be found.

And that works against us, too. Anxious to hear good news, OS/2 users will make it up if necessary.

IBM has done its best to "imply" that we won't see a new client version of OS/2 any time soon. Their messages focus on network computing, WorkSpace on Demand, the server versions of OS/2, and so forth. At Fall Comdex, when I asked, "What will I be running on my laptop?" Mike Lawrie, then in charge of OS/2, said, "OS/2 Warp Server." The answer was pretty clear to me then.

Recently IBM said in a press interview (not with me) that they wouldn't have a new client version in 1998. That was remarkably forthcoming, given the past months of weasel words. But I've seen discussions online in which hopeful and well-intentioned OS/2 users interpret that message as "We'll see the next client in early 1999."

Wake up, folks, and smell the java. Your dedication and support

are to be lauded, but while you were fighting a guerilla battle against the enemy in front of the castle, "your side" snuck out the back and surrendered.

Oh wait, that's right. IBM didn't surrender. They're just "transitioning" us to network computing. The way that you'd "transition" an 8-year-old kid from pizza to liver.

### Is it hopeless?

Perhaps it sounds like I'm giving you no choice. It does no good to hate, and supporting those you care about leaves you bereft. Fortunately, it doesn't work that way.

IBM has left us by ourselves. Or to be more rigorous: they're making it much more obvious that we've always been on our own. The only way that the OS/2 community can address the issue is to recognize the truth of the situation. The first step in doing so is to set aside the hate, lay aside the wishful thinking. Look at what's there—and then perhaps we can fix the problems, enhance the strengths, and find allies to improve the situation.

Otherwise, I fear, we'll be like Ron: trying so hard to achieve a goal that we become what we most abhor. ☹



# review PowerQuest's DriveCopy

by Marc Abramowitz

DriveCopy is a new program from PowerQuest, the same people that brought you PartitionMagic. It allows you to copy the information off of one hard drive and place it onto another, larger drive. This is especially useful as programs and operating systems are taking up more and more disk space, and, fortunately, the prices of hard drives have dropped in price.

How does DriveCopy work? First, you have to open up the computer and install the new, larger hard drive as the master drive, and the older, smaller drive as the target drive. PowerQuest said that they did this because the majority of the people would then offload the older, smaller drive (target) and remove it from the system. This would allow them not to have to reconfigure anything.

You place a DOS bootable disk into a floppy drive and boot to DOS. Next, you place the DriveCopy disk in the floppy drive and run the executable. The program

asks some basic questions about your machine configuration. Even though they are really basic questions, make sure you know what you are doing.

DriveCopy will then format the larger drive and re-partition it to match the partition proportions of the older drive. It proceeds to copy the files over and then checks all of the links. When it is all done, you can either leave in the older drive, or remove it.

What operating systems does it work with? Since the machine boots from a DOS disk, DriveCopy copies almost all of the partitions you can have. HPFS, FAT, NTFS to name a few. This sounds too good to be true!

I have used the software several times and think it is a great program. There are a few drawbacks, though. While DriveCopy checks the machine for hard drive errors, it does not correct them. You have to run programs such as ScanDisk to correct any problems. Also, before

you start, make sure that you do not have any viruses on the machine. This can cause problems.

Plus, the way the software is licensed is a little different. Even though the software is never copied to a hard drive, the license allows you to use it on one machine. Thus, if you work in a building with a hundred machines, and you wanted to upgrade each of them, you would have to get a hundred copies of the software. They do have a site license, but I am not sure of the price.

There is also a 2.1 GB partition limit.

I know that this is a DOS program and does not have a "splash" screen when loading, but I found the ads most annoying. The program displays ads for other PowerQuest programs while DriveCopy is loading, and after DriveCopy has finished its routine.

This program, as well as PartitionMagic, is a must in my tool box. ☺

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# two warned Why OS/2 won't die

by David Both

With apologies to Jerry Pournelle, There Will Be Warp! OS/2 will always be around! It will be different yet familiar.

Warp will continue to thrive in the business environment for which IBM originally designed it. It will take on new faces and roles, and many of us most familiar with it may not recognize it even when we see it.

## The new ISPs

A few months ago, I promised to talk about the new breed of ISPs. These new ISPs will deliver Office On Demand (*extended attributes*, November, 1997) to the business of the future.

Despite the fact that IBM has one of the largest global networks in the world, they are not interested in pursuing the delivery of WorkSpace On Demand to the world via their own network. Remember, IBM was offered the Xerographic technology first. This time, they developed the technology themselves and they *still* refuse to see the application.

I believe that the new ISPs will be young telephone companies which are lean and hungry—like MCI. They will be the first to see that selling services such as WorkSpace On Demand (or Office On Demand) will drive sales of their primary business, telephone services.

Those companies will run fiber to your place of business, whether that's the more traditional office or the home office. They will provide the computer for almost no cost and sell the data and voice delivery services.

Gillette had this marketing strategy down pat. They'd give away the razors so that they could sell the blades. If you take the time to consider it, disposable razors are almost exactly the same marketing approach. You are buying razor blades in a cheap, disposable package that also serves as the tool you need to use the blade.

In the future, you may very well purchase your data and computing services in a similar package. This is outsourcing for small business on a massive scale. It makes sense in the

same way as does outsourcing for many large companies.

## Not for power users

For those of you who have been complaining about this line of reasoning since I started it, this does not mean that single user OS/2 will go away. IBM is still working on the single user versions of OS/2 for the rest of us.

To me, these single user versions of OS/2 are for power users and others for whom the mass distribution capabilities of WSOD do not provide enough flexibility or raw power.

IBM is smart enough to realize that WSOD is not the right platform for everyone. WSOD is positioned as a solution for situations where large numbers of users perform the same or similar tasks using the same software. One good example of an environment for which WSOD is ideal is a large customer service center.

## Not your father's IBM

As we all know, IBM has been focusing its marketing efforts on its top 2,500 or 3,000 customers. That leaves most of the other 99% of the businesses in the world on the outside, looking in. Many of us have been very angry at IBM for dropping all efforts in the small and medium enterprise market. Many of us are equally angry with IBM for neglecting the home market, except for a brief time around the introduction of OS/2 Warp 3.

From a business standpoint, IBM's strategy makes some sense even though it makes many of us unhappy. IBM is concentrating on the 20% of its customers who generate 80% of its revenue. It sounds like a good Return On Investment (ROI) type of choice.

IBM is very good with numbers. No! Actually IBM is *awful* with numbers; they just generate a lot of them. My last few years at IBM were punctuated by producing business cases for all kinds of decisions which were made. I can't tell you

how many business cases I developed or had input into.

I also can't tell you how many of those business cases were seriously flawed because the basic assumptions on which they were based were not merely flawed. The executives who made the assumptions were totally, incredibly ignorant of the PC marketplace, ignorant of marketing in general, and ignorant of what the vast majority of their own customers wanted. IBM did not and does not know who most of its customers are.

Even worse, the people who approved those business cases knew even less than the ones who created them. But that is a disease which affects almost all companies.

Don't get me wrong! IBM is not composed entirely of people who haven't a shred of loyalty.

I had a very interesting experience at MCI the other day. We had invited IBM in to talk to our network engineers about WorkSpace On Demand. The IBM representatives were very clear that, although WSOD will be available on a number of server and client platforms, OS/2 is by far the best platform for it on both the client and the server side. I thought that was a very interesting statement. I was glad to hear something positive from an IBMer about IBM's own product.

To get back to my point, IBM originally developed the PC for business users. OS/2 was intended to be the original 80286 business operating system.

IBM is very good at creating highly reliable solutions which provide 24x7 service levels and which can be used for mission critical business processes. I think that IBM got way off track and made a big mistake when it tried to compete in the home PC market, especially with OS/2.

When IBM began trying to compete on price in the home market, some very good products and strategies went out the window. Microchannel is an example of a great product which IBM created but which could not compete in a mar-

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ket where price is the sole decision point. (It was more expensive, but you get what you pay for.) Reliability and availability are very important to businesses whether they know it or not.

### The good news

The real reason OS/2 will not die is not because IBM is working hard to keep it in their top 2,500 customers. OS/2 will live, but not because the IT directors of those corporations buy IBM's marketing, and not because of anything IBM is doing.

OS/2 will continue to be a viable force in the market because of people like you, people who continue to use it despite all of the obstacles you must overcome to do so.

OS/2 will continue to exist because *you* keep using it. It will continue to exist because you will keep

it alive until the myriads of real Java applications begin to hit the streets. Then, Java will keep OS/2 alive and allow it to grow, because it will divorce the platform decision from the application software decision. With Java—pure Java—users will finally be freed from the tyranny of having to use a third rate operating system—anything which says "Windows" on it—just to use the software of their choice.

According to IBM, *eighty percent* of all new funding going into software development is being invested in Java applications or tools. When all of those applications become available, the choice of OS/2 as a base operating system will be inevitable for many people, at least for those who like to have a choice. And it is those of you who make the choice of an operating system who

have been instrumental in the conception and planning of Warpstock.

A very interesting and heated competition is being waged right now by organizations in five cities for the rights to host Warpstock '98. The organizations competing for the honor of hosting Warpstock this year all seem to think there will be a return on their investment. Who'da thunk it? ☺

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# Another view of WorkSpace on Demand

by Kim Cheung

After reading Esther Schindler's article regarding WSOD ("WorkSpace, No Demand," *extended attributes*, November 1997), I would like to present a different view.

Most of you don't know me. I am a long time OS/2 supporter in Southern California. I invested heavily in OS/2 through my company, by developing and marketing OS/2-based computer telephony integration products. In fact, I am so deeply vested in OS/2 that if IBM formally announced that they're shelving OS/2, for real, I might as well close the doors and kiss my life savings goodbye. OS/2 is more than a weekend hobby for me.

## Business solutions

I am certainly no expert in WSOD, but I was one of the handful of ISVs invited to a WSOD training bootcamp. (Yes, it does exist—certainly not to the level of a Microsoft worldwide tour, but it exists nonetheless.) I was not even trained on the final WSOD product, just on RIPL based stuff.

I believe I am better equipped to deal with WSOD because we learned to do lots of things by hand, at the command line, rather than using the GUI tools IBM provides. For instance, I can add non-officially WSOD supported network cards (a thirteen step process!) without any help or information from IBM. I'm able to add non-officially WSOD supported client machine classes. I can even get sounds to the client, a non-officially supported function. After playing with WSOD for over two months, I can share with you some of my experience.

First and foremost: there is nothing "thin" about the capabilities of a WSOD client. If you wish, you can have 100% of OS/2 Warp 4's capabilities available at the client machine. I see nothing so far that would restrict or limit my ability to do so.

WSOD client doesn't have to be a "controlled" client. You can implement as much, or as little control as you wish. But it certainly is

comforting to know that whatever I do with my computer, it actually resides on a Sherman tank-like server somewhere, rather than on my tin-can local machine.

I can now build and add PCs to my network at the rate of less than ten minutes a machine! Not days, not hours—less than ten minutes. (Of course, that assumes the machine comes pre-assembled with the motherboard, CPU, memory, and power supply in place.)

Network bandwidth is an over-exaggerated concern. Nobody in their right mind would place thousands of WSOD workstations on the same loop. If your present network suffers simply "from users running applications locally, storing only data on the company's servers," either your network is sick to begin with, and you need help from a network doctor, or the application you are using is a piece of junk (like most Windows 95 network applications). Well-designed network aware applications do not cause network overloads.

Rather than killing OS/2, WSOD offers OS/2 a new lease on life. I know that none of us like to admit to this, but the market spoke loud and clear: they don't want OS/2 on their desktop as it exists today. Don't mind the historical reasons how it got to be that way. Don't mind IBM's inability to market OS/2. Don't mind what that Redmond monster does. OS/2, as it exists now, is not wanted by the general market, period. WSOD offers a way for OS/2 to morph and thrive in the next decade. IBM can do no worse than it has been doing with OS/2.

According to IBM, it's received more positive reactions in the last nine months to what it has done with OS/2 than in the entire ten years of OS/2's existence. Don't you think that means something to the top guns at Armonk?

On the other hand, WSOD is not meant for everyone. It's not intended to do so—and probably never will. The current estimate is that 70% of the work force can ben-

efit from it... probably 0% of fat-client based home users will.

(Although I can see a way now to stop my two sons from fighting over who gets to use the computer. I can afford to give each one of them a WSOD client machine, with my notebook as the server. I no longer need to control how long they play with their computers; they stop when I shut off my notebook!)

WSOD will open the door to computing and the information highway for millions of users not previously attended to by traditional fat-client PCs.

Moreover, WSOD will benefit some of the few remaining die-hard OS/2 ISVs. Why? These are the people that are the cream of the crop for creating shiny native OS/2 applications... and shiny native OS/2 applications shine under WSOD.

No, under WSOD, there won't be much demand for antivirus client version, standalone word-processor, or any kind of desktop utility programs. If you write standalone generic e-mail programs, you might have a problem combating Netscape. But there's lots of room for other native OS/2 packages.

Read carefully what Mike Lawrie said about OS/2 and IBM's direction. I was very surprised to hear the head of PSP being so candid about a product; it certainly beats the speech by Donn Atkins back in May at the marketing conference. I agree with some of Lawrie's assessment about the situation, and the general vision they have for OS/2. (How badly IBM might screw up the execution of their vision is a different topic.)

## My advice

If you have a native OS/2 package and it shines, make sure that it does run under WSOD. Spend some time ensuring that your package installs from the server and can propagate to multiple clients from the server. Rethink your packaging and license; for instance, I still can't run DeScribe on a network drive, even though I have no intention of pirating their software.



Most importantly, don't give up now. You have come a long way and survived all the idiotic spins IBM places on you. WSOD is an opportunity for you to get return on your investment; all you need to do is to hang in there for just a little longer. The war is not over yet. (U)

### Workspace on Demand

|                            |          |
|----------------------------|----------|
| WSOD Manager.....          | \$729    |
| One-use pack (client)..... | \$249    |
| Ten-use pack.....          | \$2,316  |
| Fifty-use pack.....        | \$11,454 |

At least one copy of WSOD Manager is required. WSOD Manager runs on Warp Server—prices shown do not include a copy of Warp Server.

For more information, see [www.software.ibm.com/os/warp/workspace](http://www.software.ibm.com/os/warp/workspace).

press release

## ScanMail Notes/Domino virus protection

Trend Micro Incorporated, the leader in server-based virus protection, announced ScanMail 1.5 for Lotus Notes, which now supports multiple platforms—Windows NT, Solaris, OS/2, and AIX.

In addition, ScanMail 1.5 adds a native Web-enabled interface for easy remote management of Domino servers, the first such interface available for any Notes virus protection.

"ScanMail 1.5 for Notes supports heterogeneous networks while protecting the Notes environment from hosting and spreading costly viruses," said Dan Schrader, director of product marketing at Trend Micro. "Many network administrators want the capability to manage their virus protection from anywhere, anytime. The new Web-enabled configuration interface in ScanMail 1.5 for Notes allows administrators to manage virus protection remotely, whether they're at a terminal within the company or using a laptop on the road or at home."

The Notes client scanning function now included in ScanMail for Notes 1.5 allows for real-time and on-demand scanning of users' databases for viruses, even encrypted

documents. ScanMail 1.5 also scans Notes scripts on the server for viruses.

Cabot Corporation has been using ScanMail for Notes for several months. "For Cabot, the solution had to delete viruses consistently and we needed an easy way to deploy virus patterns," said Marian Cole, a senior analyst at Cabot. "Trend's ScanMail was the only solution on the market that had these two features."

ScanMail 1.5 for Notes is available now, directly from Trend Micro and through its worldwide distribution and reseller network. The price of \$835 for a 25-user license includes one year of program and virus pattern updates. For details, send e-mail to [sales@trendmicro.com](mailto:sales@trendmicro.com) or call 800-228-5651 in North America. Evaluation software may be downloaded from [www.antivirus.com](http://www.antivirus.com).

In addition to ScanMail 1.5 for Notes, Trend also provides virus protection for Lotus Messaging Switch (LMS) 3.0 through an agreement with the Softswitch division of Lotus. When Trend technology is used with LMS, email attachments are automatically scanned on the fly at the LMS server to prevent distri-

bution of infected mail across large corporate networks.

### About Trend Micro

Trend Micro, based in Cupertino, California, is the leading developer of server-based virus protection, with products designed for file servers, Internet gateways, and email servers. Trend Micro's products are sold directly and through a network of corporate and value-added resellers.

Trend Micro's virus protection technology has been chosen by Oracle, Intel, Netscape, Sun Microsystems, Lotus, Wingra, Control Data Systems, SCO, HP and WorldTalk as a key part of their server security solutions. Trend technology is in the best-selling LANdesk VirusProtect, sold by Intel.

More than 14 million users worldwide are protected by Trend anti-virus technology. Trend maintains the Antivirus Support Center at [www.antivirus.com](http://www.antivirus.com), the most comprehensive on-line source of computer virus information. Evaluation copies of all of Trend Micro's products may be downloaded from [www.antivirus.com](http://www.antivirus.com).



# Drive Image, ZIP drives, and Warp, oh my!

by Pat VanHorn

PowerQuest's Drive Image promises to backup your hard drive by doing a sector copy of your partition(s) to a compressed file. It supports any valid drive letter, redirected drive, or network device. Because it is a sector copy, it essentially supports any partition type, including OS/2's HPFS and FAT.

Drive Image comes on CD ROM, but to run Drive Image on DOS or OS/2, you create a bootable floppy diskette. However, the Drive Image boot diskette has no ZIP drivers loaded, and there's not enough space to include them. As a side note, I will mention that PowerQuest uses the (non-Microsoft) Caldera DR-DOS 7 (formerly DR DOS 6) on the DOS program diskette they provide.

While PowerQuest's program may be superior, their documentation is a little lacking. After posting a question on the members Mailing List, POSSI member Christopher Pratt suggested automating the procedure by putting all of the drivers and programs together in one batch file, with proper PAUSE and screen prompts to allow you to swap disks.

Christopher's instructions follow:

① Copy the Drive Image Diskette using DISKCOPY and label it "Drive Image Auto Zip Disk #1."

② DISKCOPY your Zip driver. Install disk and label it "Drive Image Auto Zip Disk #2." Keep the original disks and modify these copies.

Note that Disk #1 contains the PowerQuest Drive Image executable, PQDI.EXE, which takes up almost the entire disk. Disk #2 contains support for a DOS device, in this case GUEST.EXE, the DOS device driver for a ZIP drive.

③ On Disk #1, rename or delete the original AUTOEXEC.BAT file. Using a text editor, create a new AUTOEXEC.BAT file that simply has two lines:

```
@ECHO OFF
```

```
B. BAT
```

The B.BAT file contains the actual commands. Chris said that he likes to create another batch file and call it from the AUTOEXEC.BAT because B.BAT needs to exist on both diskettes.

④ Create B.BAT on the first diskette. Note that B.BAT needs to be on *both* diskettes so, create it on one, then copy the *exact* file to the second disk before testing them.

B.BAT will contain everything you need to complete the installation of Drive Image and the ZIP drivers:

```
PAUSE
```

```
GUEST. EXE
```

```
PAUSE
```

```
PQDI. EXE
```

Note that the PAUSE command actually pauses until you press a key, then it will process the next command. So using PAUSE will halt the



batch process until you can swap disks and press a key to let it know you are ready to continue loading drivers.

⑤ To provide screen prompts to the batch file (this batch file can get as fancy as you like):

```
@ECHO OFF
```

```
ECHO Insert Disk #2 and
```

```
PAUSE
```

```
GUEST. EXE
```

```
ECHO Re-Insert Disk #1 and
```

```
PAUSE
```

```
PQDI. EXE
```

When I first ran GUEST.EXE, it identified my ZIP drive as D: which is my OS/2 Warp 4 partition. Chris assured me that DOS could only see my C: FAT partition, not any HPFS partitions (something I'd forgotten about DOS), but that Drive Image would support backing up the HPFS partition from within the program.

If Drive Image detects that you are saving your image to removable media (i.e. ZIP, JAZ, etc.) it enables a media-spanning feature that spreads the image file over a series of disks.

Chris tells me that his experience with Drive Image and network drives has been very positive. He has successfully cloned over 85 OS/2 Warp workstations (with identical hardware) using Drive Image Professional (which is more expensive, but is suited for cloning systems.)

After a successful backup of my HPFS partition using Drive Image, Chris suggested writing this article for extended attributes. This has been a true "users helping users" story! ☺

Pat VanHorn has been a member of POSSI since April, 1997. Pat can be reached at [vanhornp@raex.com](mailto:vanhornp@raex.com).

Christopher Pratt is the LAN Administrator at the National Air and Space Museum and is an IBM Certified OS/2 Engineer. He has been a member of POSSI since December 1996. Christopher can be reached at [cdpratt@ibm.net](mailto:cdpratt@ibm.net)

More information on PowerQuest's Drive Image can be found at: [www.powerquest.com](http://www.powerquest.com)

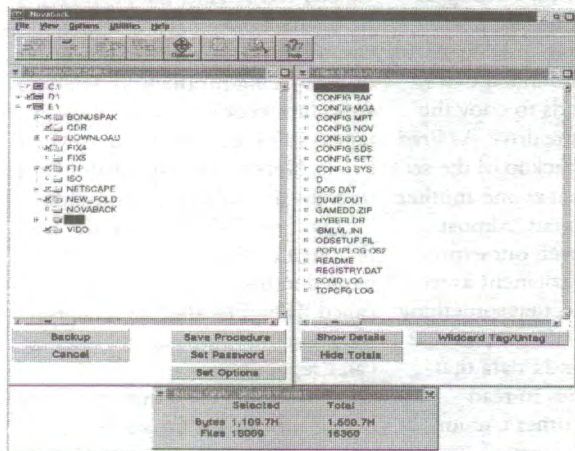
Drive Image can be purchased at resellers like Indelible Blue, Inc. [www.indelible-blue.com](http://www.indelible-blue.com)



Based on my experience, Novaback backup software is the ultimate in data protection. The product incorporates data backup, antivirus, and disaster recovery, and it supports more platforms and hardware configurations on one CD than any other I have seen.

## Novaback

by Burke Swanson



OS/2 users often run more than one operating system. Novaback provides a uniform front end, so you will feel comfortable with the product no matter which OS you operate in. This is the true sign of a well thought-out program designed for both the novice and experienced user. In this article, I focus on the OS/2 side of Novaback, but remember that everything I describe is true for the other platforms, to one degree or another.

The version of Novaback that I reviewed does not backup extended attributes. This code is being written now and should be available by the time you read this.

### Getting it going

The installation and setup of Novaback is among the easiest I have encountered. You run SETUPOS2 and follow the prompts. It asks which product to install: QIC, SCSI/IDE, or Disk to Disk.

Over 400 SCSI and QIC tape drives are supported, and "a cast of thousands" of removable media types, though no QIC support for DOS.) Other than that, the install is hands off.

Novaback's tape setup is impressive. After clicking the auto configure button, in every case I have come in contact with—over 75 installs—Novaback detects the type of tape drive and installs the driver in CONFIG.SYS. Reboot, and you are ready to backup.

One note: if you run a SCSI system your system must be able to see the tape drive before Novaback does. You can tell if your system sees the tape drive by watching the SCSI driver load.

### Safe and sure

Safe and Sure is how I felt with the very simple graphical interface to Novaback.

You select the files to backup (or not to backup) with a click: no complicated tagging or filter. (But if you like filters, the capability is in there.) An options button lets you set up all the backup possibilities such as full, changed files, overwrite, and antivirus. This is also where you set up the verify options. Then save the procedure for later use, or run it now. This process of backing up is so easy that even a novice user will understand it on the first time out.

And it's fast. On my system with a 1.3 gig backup it took 44 minutes to backup, and 33 minutes to restore. Novaback moved data at the top speed supported by my DDS2 tape drive, at 25-35 MB a minute. I installed Novaback on a system with a DDS3 tape drive and got a transfer rate of 120 MB per minute. I also installed it on a DLT (Digital Linear Tape), where it backed up over 9 GB in 10 minutes—that's *really* fast!

Novaback is also the only product I've encountered that would support DDS3 or DLT. In fact, most DLTs ship with a version of Novaback in the box.

The scheduler in Novaback is as flexible as you are. It allows for day of week, day of month, and day of week of month. Let's say you do most of your computing in the first week of the month. You can set up Novaback to do a backup on the first Friday of the month every month. Also included is a command line feature. Anything you can do at the command line can be scheduled.

### Restoring faith

Novaback Restore runs the same way as backup, only you select the files from the tape rather than the disk drives. Novaback uses an indexing structure, stored on the tape, so there is no scanning for the file; it just takes off and restores it. This can be a godsend, as anyone who has ever had to rebuild a database stored on a disk would know.

Disaster recovery is done a little differently. After making copies of your OS/2 Warp install diskettes, the Novaback program updates them for the disaster recovery process. If your system crashes, you boot from those diskettes, and insert your last full backup tape. It will then restore your system to that point. Yes, that's right; no more reinstalling the OS, then the backup software, then running the restore (hoping that none of your files are in use).

### My own experiences

It doesn't matter which backup program you use, but please use one. I work in the computer industry at one of the best break/fix companies in the country. I cannot tell you the number of times I have replaced a hard drive that has gone south. Here is a typical conversation:

Customer: I think my hard drive crashed.

Tech: Yep, it won't even spin up. Do you have a backup?

Customer: No. Can't you just send the drive out for repair?

Tech: I'm sorry, but no. The vendor warranties the drive, so we need to send it to them. They send us a new one to replace it.

Customer: I saw one of those places that get the stuff off the drive, even if it's bad. How about that?

Tech: We can send it out, but there is no guarantee. It's \$500 to \$750 just to look at the drive.

Customer: Whoa!

Tech: Do you have all the software that was on the drive?

Customer: I think so but I need to look for it. (Rummage through desk) Jeez, where did I put that?

Tech: While you look, let me check when the new drive will be in.

I have this conversation *at least once a month.* ☹



## *the president's corner* **A cautionary tale**

by Dick Krueger

Backup and recovery: having worked with databases for the last 28 years, these are topics with which I have grown familiar... no, make that *intimate*. Early on, I was given an object lesson in the importance of proper backup and recovery procedures.

One beautiful sunny weekend, years ago, our team was in the company's computer room preparing to install and test a new version of the database management system (DBMS) software. This was the DBMS on which the company's production operations depended. Since we planned to test the new software on our production databases, we felt it prudent to make sure we had recent backup copies in case anything untoward should occur. To that end, one of my coworkers, whom we will call Fred (because that was his name), prepared job control language (JCL) statements to drive the execution of the system utility that would create the required copies of the databases, which resided on two hard disk drives.

Normally, we would have used magnetic tape as our backup media. But, since it was a beautiful weekend day, Fred decided to save time by

copying our two database hard drives to two empty hard drives. That step would likely save us an hour or more—double that, if we needed to restore the databases when we finished testing.

Fred carefully prepared the JCL statements and ran the backup of the first drive. Not having performed this particular maneuver before, we were astounded that it only took 45 seconds to copy the contents of the entire drive. As Fred started to run the backup of the second drive, we looked at one another in awe and amazement. Almost immediately, however, our expressions turned to puzzlement as we realized, one by one, that something must not be right. It's not possible to copy, in 45 seconds, data that takes several minutes to read sequentially under other circumstances.

### **Stumped**

We were stumped. What happened? Did the copy utility not work? No, the results report said everything ran just fine. So, what went wrong? It took only a few moments, and another pair of eyes besides Fred's, to get to the bottom of the situation.

The answer was simple. Never having used that particular utility program before, Fred made a minor mistake in setting up the JCL statements. Do you see it coming? Yep, Fred copied the empty hard drive onto the database drive. After Bob called Fred a name that I can't repeat here (this is, after all, a family publication), we got down to the business of recovering production databases from last week's backups and log tapes—a process that took several hours. Needless to say, we didn't get to enjoy any of that beautiful day.

Later on, Fred became the first recipient of the award (of sorts) named in his honor. No, it wasn't called "The Freddie." It was given the name that Bob called Fred that I can't repeat here.

Why do I tell you this little story? Because I think there's a lesson or two in it. One, be sure you always have usable backups of your important data. Two, when you're trying out a new backup procedure, test it on noncritical data first. That includes testing the recovery procedure. Three, don't spend your weekends in the computer room. Instead, get out and enjoy life. As Daisy, the cow, says, "Take time to stop and eat the flowers." ☺

## *net* **New listservs at possi.org**

by Bill Schindler

The new mail lists are up and running!

The Phoenix OS/2 Society now has two new mail listservs for members. The discussion list is for general discussion among members, which ranges from requests for help, to technical information, to general banter. The discussion list acts as a forum for the POSSI community.

The announcement list is a "read-only" list that is used to send out announcements.

Both lists now have an option for receiving a daily digest, rather than the messages as written. For those

unfamiliar with the digest option in a listserv, the digest message contains all the messages posted to the list during the day. The digest makes it so that you receive one message a day from the list rather than 20 or more individual messages.

One advantage of the new lists is that you can subscribe and unsubscribe directly without needing to send an email to a person. There's also a Web page on the POSSI site that allows you to subscribe interactively. (If you're a member and you want to subscribe, send an email to

editor@possi.org asking for the URL.)

The Web site has also been updated and streamlined. The Java applets have been removed from the home page so that it now loads in seconds. Check it out at [www.possi.org](http://www.possi.org).

Thanks to Webmaster Mike Briggs and to Dirk Terrell of Falcon Net for all the hard work they put into getting the Society's new site up and running. ☺



# Getting your small business onto the Internet

by Esther Schindler

Nearly every member of the Phoenix OS/2 Society has an Internet connection. However, many of us have setups that look like a Rube Goldberg contraption, with individual Internet connections that don't necessarily make the best use of the small business' resources. Plus, when it's time to upgrade the business from client dial-up accounts to the "big time," the process becomes a complex and expensive one.

The March general meeting of the Phoenix OS/2 Society welcomes a vendor that promises a solution. Chris Polos, from Whistle Communications, will be showing off the company's major product, the InterJet.

## The Inter-what?

The Whistle InterJet is an all-in-one solution that provides email, Web access, and Web publishing productivity for everyone in a small office of up to 100 people. To get your network of computers up and running on the Internet, simply plug in a phone line and your Ethernet LAN into the back of the InterJet. Through a Whistle-Authorized Internet Service Provider (ISP), the InterJet automatically configures itself and eliminates the need for any complicated system setup. The InterJet is easily upgradeable, providing a range of bandwidth capacity from 33.6Kbps to ISDN and Frame Relay (56Kbps to full T1 speeds).

**Email:** The InterJet handles all your email, both within your office and over the Internet. This allows

you to quickly and easily communicate with other employees in your company as well as with your customers, business partners, and vendors.

**Web Access:** The InterJet gives every employee in your company full networked Internet access to take full advantage of the World Wide Web.

**Web Publishing:** The InterJet comes with a built-in Web server for both Internet and Intranet web publishing. With the bundled HTML editor, Claris Home Page, you can publish and update the latest information to your customers and co-workers with drag-and-drop simplicity.

**Security:** The InterJet has built-in firewall security to keep people out of your important data and give you complete control over who can access that data.

**System Administration:** Connecting your office computers to the InterJet is straightforward. From the InterJet's web browser-based administration program, it's remarkably easy to set up user accounts for every person in your office. All you have to do is type in a name and password and click on the services you want each user to have. That's it!

**Easy to set up, easy to use:** The InterJet was designed to make the Internet work for you instead of you working for it. Via its auto-configuration process, the InterJet takes all the stress out of installation.

## All this, and OS/2 support too?!

Well, it's not perfect. At this point, you need a Macintosh or Windows 95 system to set up and configure the InterJet. But it works just fine with OS/2—and your OS/2-based office. Have TCP/IP, will travel!

If you want to learn more about the InterJet before the meeting, or if you can't attend but are interested in finding out more, head over to [www.whistle.com](http://www.whistle.com).

## When and where

The general meeting is at 7:00pm on Tuesday, March 10, at the Mountain Preserve Reception Center, 1431 East Dunlap. The "random access" Q&A session starts at 6:30pm. We're sure to reconvene after the meeting at Coyote Springs. ☺



## General meeting

### what

- ▲ Whistle Communications showing InterJet

### where

- ▲ Mountain Preserve Reception Center  
1431 E Dunlap  
Phoenix, Arizona

### when

- ▲ Tuesday, March 10, 1998
- ▲ 6:30pm: Q & A session
- ▲ 7:00pm: Regular meeting



# history Coming events

This is a list of events scheduled by the Phoenix OS/2 Society. Unless otherwise noted, active members may attend any scheduled event for free.

## Meeting notes

For the latest updates on the Society's event calendar, check the Web site at <http://www.possi.org>.

For meeting information and other queries, call the Phoenix OS/2 Society's voice mail at 602-949-4341.

If you have suggestions, ideas, or comments on the content of general meetings, contact the Society's Program Chair, Esther Schindler, at the general meetings or send email to [esther@bitranch.com](mailto:esther@bitranch.com).

| March |    |    |    |    |    |    |
|-------|----|----|----|----|----|----|
| S     | M  | T  | W  | T  | F  | S  |
| 1     | 2  | 3  | 4  | 5  | 6  | 7  |
| 8     | 9  | 10 | 11 | 12 | 13 | 14 |
| 15    | 16 | 17 | 18 | 19 | 20 | 21 |
| 22    | 23 | 24 | 25 | 26 | 27 | 28 |
| 29    | 30 | 31 |    |    |    |    |

| April |    |    |    |    |    |    |
|-------|----|----|----|----|----|----|
| S     | M  | T  | W  | T  | F  | S  |
|       |    |    | 1  | 2  | 3  | 4  |
| 5     | 6  | 7  | 8  | 9  | 10 | 11 |
| 12    | 13 | 14 | 15 | 16 | 17 | 18 |
| 19    | 20 | 21 | 22 | 23 | 24 | 25 |
| 26    | 27 | 28 | 29 | 30 |    |    |

| May |    |    |    |    |    |    |
|-----|----|----|----|----|----|----|
| S   | M  | T  | W  | T  | F  | S  |
|     |    |    |    | 1  | 2  |    |
| 3   | 4  | 5  | 6  | 7  | 8  | 9  |
| 10  | 11 | 12 | 13 | 14 | 15 | 16 |
| 17  | 18 | 19 | 20 | 21 | 22 | 23 |
| 24  | 25 | 26 | 27 | 28 | 29 | 30 |
| 31  |    |    |    |    |    |    |

| June |    |    |    |    |    |    |
|------|----|----|----|----|----|----|
| S    | M  | T  | W  | T  | F  | S  |
|      | 1  | 2  | 3  | 4  | 5  | 6  |
| 7    | 8  | 9  | 10 | 11 | 12 | 13 |
| 14   | 15 | 16 | 17 | 18 | 19 | 20 |
| 21   | 22 | 23 | 24 | 25 | 26 | 27 |
| 28   | 29 | 30 |    |    |    |    |

| July |    |    |    |    |    |    |
|------|----|----|----|----|----|----|
| S    | M  | T  | W  | T  | F  | S  |
|      |    |    | 1  | 2  | 3  | 4  |
| 5    | 6  | 7  | 8  | 9  | 10 | 11 |
| 12   | 13 | 14 | 15 | 16 | 17 | 18 |
| 19   | 20 | 21 | 22 | 23 | 24 | 25 |
| 26   | 27 | 28 | 29 | 30 | 31 |    |

## March 1998

- 3 net.sig (Internet SIG). Meeting is 6:00pm to 8:00pm. Coordinator Mike Briggs. Location: KDC, 2999 N 44th St, 4th floor, Phoenix.
- 3 Developer's SIG. Meeting is 6:00pm to 8:00pm. Coordinator Lyle Wilson. Location: KDC, 2999 N 44th St, 4th floor, Phoenix.
- 5 Magazine submission deadline for April issue. Articles should be sent to [editor@possi.org](mailto:editor@possi.org). For other arrangements, call 602-585-5852.
- 10 HOW (How OS/2 Works) GIG. Meeting is 3:30pm to 5:30pm. Coordinators Rosey Rosenwald and Stan Kropen. Location: Mountain Preserve Reception Center, 1431 East Dunlap, Phoenix.
- 10 General meeting; Whistle Communications' InterJet. Meeting is 7:00pm to 9:00pm. Q&A session is 6:30pm to 7:00pm. Location: Mountain Preserve Reception Center, 1431 East Dunlap, Phoenix.

- 28 Board meeting and magazine prep. Meeting is 10:00am to 1:00pm. Eat a brunch, learn about the inner workings of the Society, and help get *extended attributes* ready to mail. Location: Bill and Esther Schindler's house in north Scottsdale, 9355 E Mark Lane. Call 585-5852 or send email to [esther@bitranch.com](mailto:esther@bitranch.com) for directions. Remember to bring a potluck dish to share, too.

## April 1998

- 5 Magazine submission deadline for May issue. Articles should be sent to [editor@possi.org](mailto:editor@possi.org). For other arrangements, call 602-585-5852.
- 7 net.sig (Internet SIG). Meeting is 6:00pm to 8:00pm. Coordinator Mike Briggs. Location: KDC, 2999 N 44th St, 4th floor, Phoenix.
- 7 LAN SIG. Meeting is 6:00pm to 8:00pm. Coordinator Elliot Abramowitz. Location: KDC, 2999 N 44th St, 4th floor, Phoenix.
- 14 HOW (How OS/2 Works) GIG. Meeting is 3:30pm to 5:30pm. Coordinators Rosey Rosenwald and Stan Kropen. Location: Mountain

Preserve Reception Center, 1431 East Dunlap, Phoenix.

- 14 General meeting; Southsoft's PMMail and PMNews. Meeting is 7:00pm to 9:00pm. Q&A session is 6:30pm to 7:00pm. Location: Mountain Preserve Reception Center, 1431 East Dunlap, Phoenix.

- 25 Board meeting and magazine prep.

## May 1998

- 5 net.sig (Internet SIG). Meeting is 6:00pm to 8:00pm. Coordinator Mike Briggs. Location: KDC, 2999 N 44th St, 4th floor, Phoenix.
- 5 Developer's SIG. Meeting is 6:00pm to 8:00pm. Coordinator Lyle Wilson. Location: KDC, 2999 N 44th St, 4th floor, Phoenix.
- 5 Magazine submission deadline for June issue. Articles should be sent to [editor@possi.org](mailto:editor@possi.org). For other arrangements, call 602-585-5852.
- 12 HOW (How OS/2 Works) GIG. Meeting is 3:30pm to 5:30pm. Coordinators Rosey Rosenwald and Stan Kropen. Location: Mountain Preserve Reception Center, 1431 East Dunlap, Phoenix.
- 12 General meeting. Meeting is 7:00pm to 9:00pm. Q&A session is 6:30pm to 7:00pm. Location: Mountain Preserve Reception Center, 1431 East Dunlap, Phoenix.

- 23 Board meeting and magazine prep.

## June 1998

- 2 net.sig (Internet SIG). Meeting is 6:00pm to 8:00pm. Coordinator Mike Briggs. Location: KDC, 2999 N 44th St, 4th floor, Phoenix.
- 2 LAN SIG. Meeting is 6:00pm to 8:00pm. Coordinator Elliot Abramowitz. Location: KDC, 2999 N 44th St, 4th floor, Phoenix.
- 5 Magazine submission deadline for July issue. Articles should be sent to [editor@possi.org](mailto:editor@possi.org). For other arrangements, call 602-585-5852.
- 9 HOW (How OS/2 Works) GIG. Meeting is 3:30pm to 5:30pm. Coordinators Rosey Rosenwald and Stan Kropen. Location: Mountain Preserve Reception Center, 1431 East Dunlap, Phoenix.
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- 27 Board meeting and magazine prep.



## Meeting locations

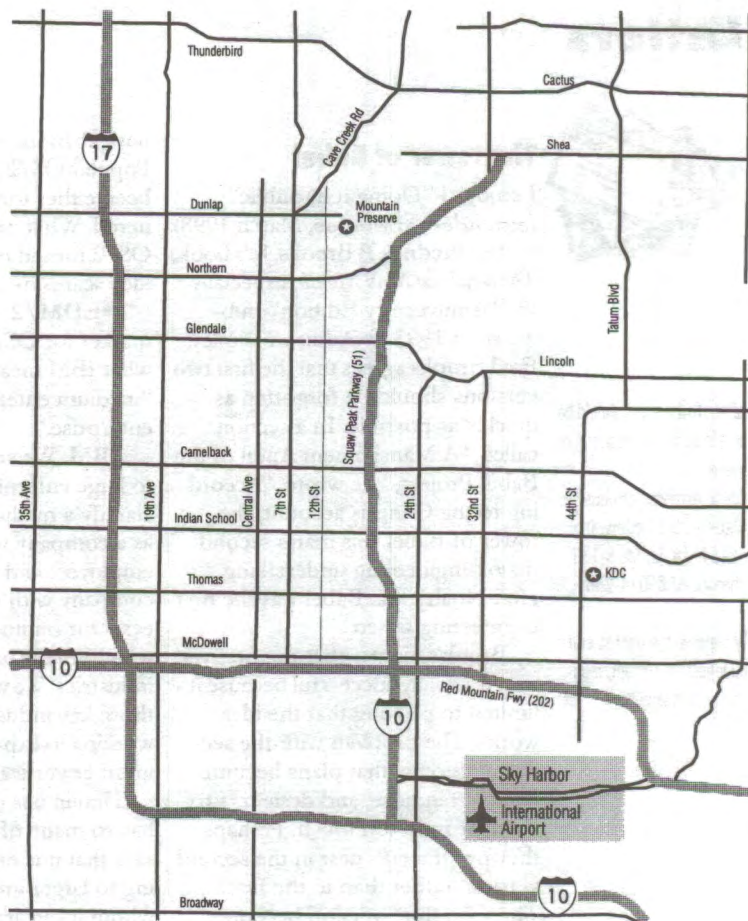
General meetings are held at the Mountain Preserve Reception Center, 1431 East Dunlap, Phoenix.

From the Black Canyon, exit at Dunlap and head east. From the Squaw Peak, exit at Northern. Go west to 12th Street, turn right and go north to Dunlap, turn right, and it's two blocks up on the right.

The "How OS/2 Works General Interest Group" now meets at the Mountain Preserve Reception Center on the afternoon of the general meeting.

The Internet SIG, Developer's SIG, and LAN SIG all meet at Knowledge Development Center, 2999 N 44th St, Suite 400. That's just north of Thomas, in the building with the green dome. Plenty of free parking space is available in the garage behind the building. 📍

If the mailing label on the back cover says "sample," then this may be the only copy of *extended attributes* that you will ever receive. If you want to keep getting the magazine (and receive all the other benefits of membership), you must join! A 12 month membership in the US is only \$30. (See the form for membership pricing in other areas.) Tear out the application form, fill it in, and mail it with the membership fee to the Society's address.



## SIG news

### net.sig

by Mike Briggs <mike@bbz.net>

At the last net.sig meeting we discussed the new POSSI Web server, and the two new listservs, now active, that replaced the old members@possi.org. We went over the use of the lists, and everyone was shown how to subscribe to them over the Web.

Robert Rosenwald attended the meeting and spoke to us about his experiences as a US West MegaBits cus-

tomers using DSL technology. He detailed the installation and what it took to get OS/2 Warp 4 working with MegaBits.

Next meeting, we'll look at email filters to help handle the new POSSI listservs, and mayhap Warren Tripp will be able to relate his experiences with a cable modem from COX@Home. See you there. 📍







## The tower of Babel

I enjoyed "Doing it in public" (extended attributes, March 1998).

See Fredrick P. Brooks, Jr.'s book, *The Mythical Man Month*, especially the "Anniversary Edition" published in 1995 by Addison-Wesley. Fred Brooks agrees that the first two versions should be forgotten as quickly as possible. In a section called, "A Management Audit of the Babel Project," he wrote, "According to the Genesis account, the tower of Babel was man's second major engineering undertaking, after Noah's ark. Babel was the first engineering fiasco..."

Brook's view is that the first version is usually successful because it's limited to proving that the idea works. The problem with the second version is that plans become overly grandiose, and designers try to make it do too much. Perhaps they put the rat's nest in the second version, rather than in the first. Then the third version becomes workable.

Thanks also for the account of the Microsoft preview of Chicago, and their count of 32-bit content.

Curtis Jones

## Doing something about it

I took the time to read the EDM/2 interview with IBM's OS/2 people ([www.edm2.com](http://www.edm2.com)). Everyone has drawn the same conclusion: that IBM is completely disinterested in SOHO or single user use of OS/2. To those of us who have been using OS/2 since its early years, this is just short of a crushing blow.

Various proposals have been put forth about what should be done in the face of our being dismissed by IBM. Some have been discussed in small groups, but lack widespread acceptance. The most widely discussed idea is to have IBM license a version to an ISV.

The transference of OS/2 for SOHO from IBM to any single vendor will not serve the community of users. A number of OS/2 ISVs have proven that they are not interested in OS/2 unless it turns them a tidy profit. Far too many OS/2 ISVs

have abandoned OS/2 and its users. Popular OS/2 applications have been either forgotten or back burned. What would become of an OS/2 turned over to an ISV? The idea scares me out of my wits.

"EDM/2: What is IBM's target market for OS/2? Please define what IBM means by "enterprise," "medium enterprise," and "large enterprise."

IBM: We are targeting medium to large enterprises with OS/2. We classify a medium-sized enterprise as a company with 200-2,000 employees and a large enterprise as a company with over 2,000 employees. Our traditional strength lies with both the banking and insurance industries. We will continue to target those key industries, while also working to expand our market share in other vertical industries."

Herein lies the problem which has so many of us troubled. IBM says that it is only interested in talking to larger groups of users, with whom it can arrange bulk contracts, create single points of contact, and do business in which they can put forth solutions.

Within that very same quote from EDM/2, however, we find a gem which can become our solution to this "crisis" we are facing.

Without going into the specifics of our plans at this time, I can say that Team OS/2 is working towards that solution. Starting February 16, we will collect information about OS/2 users worldwide. Visit our Web sites ([www.teamos2.org](http://www.teamos2.org) and [www.teamos2.com](http://www.teamos2.com)) to provide information about your use of OS/2, as well as the types of systems on which it is installed.

The Web site will feature forms to obtain a member ID, enter information about your computer systems, the types of software you use, enhancements you would like in the system, and software programs you would like written/porting to OS/2. We will gather this information as part of our plan to approach IBM as a cohesive group. Details will be provided at the time you sign up.

We are working now to create a database of the varieties of hardware

and software that are available so they will be available for choices on the Web site as part of the information gathering phase. If you can contribute a list of video cards, sound cards, or other gadgets which can be attached and used with OS/2, please send a message to [webmaster@teamos2.org](mailto:webmaster@teamos2.org) with your lists. We will incorporate them into the forms on the Web site.

Michael McLagan  
Team OS/2 Online

## Gut response

[This is a reprint of a response from Tom Rowe to IBM regarding Lotus' recent announcement that a new Notes client would not be released for OS/2.]

Ms. More,

Your reply to my email is appreciated. It would be even more appreciated if it actually addressed the issues I outlined in my original email.

Form letters are really rather pointless in my opinion. Especially if they sidestep, as yours did so well, the point of the original communication. Namely, by eliminating my ability to develop Notes/Domino applications in OS/2, IBM will, in all likelihood, force me to entirely eliminate my Warp Server based LAN (running several Warp Server Advanced servers) and replace it with one based on NT. I can't even replace them with AIX, since there will be no UNIX Notes/Domino client. If your bosses don't understand why this is, I will gladly explain it to them. And if they also don't understand how this will make me suspicious of IBM's commitment to any of the myriad other IBM products I currently use, I will gladly explain that to them as well.

I'm sharing your reply with some colleagues who are also very concerned about the impression that IBM/Lotus present on OS/2. Namely: that it appears IBM/Lotus wish it would go away.

Tom Rowe  
Network Systems Administrator  
University of Wisconsin

Letters to the editor should be sent to [editor@possi.org](mailto:editor@possi.org), or mailed to:

Editor, extended attributes  
Phoenix OS/2 Society, Inc  
5515 N 7th St, Ste 5-133  
Phoenix, AZ 85014-2585

We reserve the right to edit all letters for content, readability, and length.



## Last month How suite it is!

by Joel Frey

One of the first packages I purchased when I installed Warp was Lotus SmartSuite for OS/2. Along with twenty diskettes and several books, it included Ami Pro 3.0 (a name I always thought sounded like a household cleaning product), cc:Mail, Lotus 1-2-3, Freelance, and Lotus Value Pack, whose value remains unknown to me to this day. Despite being a native OS/2 product, there wasn't much about it that was smart. It was slow, clunky, and not very reliable. Actually, it was an OS/2 imitation of a Windows product (or maybe a DOS product... sometimes it's hard to tell them apart). I never got much use out of that copy of SmartSuite; it's been a long time since I've even had it installed, and I've never really missed it. This was shelfware at its finest.

But that was then and this is now. IBM has since acquired Lotus and one of the benefits is the redevelopment of the OS/2 version of SmartSuite, first as SmartSuite 96, and now, SmartSuite for OS/2 Warp 4.

IBM moved up a notch in my estimation, when I received a mailing over a year ago that said (the astute will recognize that I'm paraphrasing here), "As one of the poor suckers who bought the original SmartSuite for OS/2, you can buy SmartSuite 96 for the cost of the media, about \$30." Cautious about throwing good money after bad, I waited until the deadline; with no additional information about the product, I placed my order. This turned out to be a good thing and helped to remove some of the bitterness of the original purchase. Unfortunately, I have still not found the time nor had the need to use it extensively.

### Boy, are my arms tired

The speaker at our January meeting was a very tired Michael Steinberg of Lotus, who flew in from Boston that day to talk about and to demonstrate the soon to be released (perhaps by the time you read this), SmartSuite for OS/2 Warp 4.

Although their bread and butter is still the Windows platform, Lotus has worked hard to make this into a real OS/2 application, albeit constrained by a code base shared with a less powerful platform. As OS/2 users, it almost seems strange to be looking at a relatively mainstream package running on this platform.

Rumor has it that some folks at Lotus resent having to spend time developing an OS/2 version of the product, but they might consider their situation; their main competition is bundled, almost for free, with

able future, especially for graphics intensive applications.

### Product status

SmartSuite for OS/2 Warp 4 went into beta test toward the end of last year. Lotus had not intended to have a second beta but the feedback was so good they decided on a second round. Michael Steinberg said they were surprised to have 1,500 nominees worldwide for the first beta, when they only expected a few hundred.

Lotus had to pare this down to about three hundred to make it manageable, resulting in the official beta testers being a very elite group, some of whom were in attendance at our meeting. Michael said that he asked that Beta 2 be made free to the public to show their appreciation for the support and patience of OS/2 users. They've made it available from the Lotus Web site and also worked with Hobbes to make it available there. But, because it's such a large download at normal modem speeds, Lotus offered to let J3 Technologies and Indelible Blue make the beta available on CD, with a small charge to cover media and distribution costs.

At the time of the meeting in early January, the English version of the product was scheduled to ship at the end of the first quarter, about the second or third week of March; the international versions will follow over the next two months.

The original schedule had been substantially impacted by the development of the Open32 API, which turned out to be more complex than IBM or Lotus had anticipated. Although a good idea conceptually, this ended up requiring over seven hundred API's to be developed, and was complicated by the existence of the Microsoft Foundation Class, and the last fifty of the API's had just been completed recently. Whether the availability of a substantial Open32 API set will improve the availability of cross-platform applications remains to be seen since OS/2 users generally prefer full-



the operating system(s) on which Lotus runs in most cases. Most users already have experience with that software because it (or one of its subsets) came preloaded on their home systems; given a choice, they will go with what they know. Barring a major technological breakthrough, their prospects for success on that platform hinge more on retaining their existing customer base with better technical offerings than increasing their market share substantially, unless Microsoft ends up losing its death grip on the application preload business as the result of an antitrust settlement. Their best prospect may well be the success of IBM's strategy to deploy OS/2-based NC's in the larger organizations where Lotus still thrives. Lotus would be virtually the only game in town for a native office suite in that environment. It remains to be seen if the combination of bandwidth, horsepower, and API maturity will make a Java-based office suite a practical alternative in the foresee-

continued on page 20



# building blocks To error divine

by Marilyn Pizzo

You're in your inner sanctum: the computer room. You just purchased more memory for your computer system, and you're looking forward to the increased performance from the new RAM. Once the installation is complete, you boot up your computer, and watch the memory check register every bit of memory. Bingo! Chest out. Be proud of yourself. It's all there. The operating system loads, and you open your favorite program. Then—oh no! You're trapped.

Last month we looked at the basic system error messages that might appear while you work. But you've really done it now. Black screen, white letters: the system has stopped. You have gotten your computer into a trap.

Trap errors are the most fatal of errors. The only way out is to reboot with a "three key salute," the good old Ctrl+Alt+Del.

## Voice of experience

If you get an Internal Processing Error, the system halts and gives you the black screen error message. OS/2 does not attempt to correct the problem, because doing so may make things even worse. All of the numbers and letters on the screen indicate where the problem lies. You might as well copy all the information as it is shown on your screen the first time you get the Internal Processing Error because the second time you get the trap you will be too angry to see straight. Believe me, this is the voice of experience.

Depending on what caused the error, you may be able to fix the problem yourself.

I recently purchased more memory for my computer. I installed it with no problem. However, when I tried to do virtually anything, I first got a TRAP 0E and then a Trap 02. Since the only thing I changed was to install the additional memory, the source of the problem was obvious; it was apparent that OS/2 didn't like what I had done.

I thought maybe there was a compatibility problem with the original memory so I took out the old

and just had the new installed. That was certainly no help. More traps and errors. So, being the intelligent being I am (no comments please) I reinstalled the original memory. Hooray! I was back in business. (I have since purchased new memory and am a happy camper working with 96 MB.)

Let's look at what the messages mean, so we can analyze the problem if we ever get a trap error.

## Common problems

TRAP 02 is the most common non-application TRAP error message. It indicates that there is a problem with the physical memory. Since OS/2 makes use of every byte of RAM you have, if there is a problem it will halt the system. The most common causes of a TRAP 02 are SIMMs (single inline memory modules) that are not the same speed, not installed properly, or are failing. RAM comes in a variety of speeds measured in nanoseconds (ns). Mixing speeds doesn't work very well when you have an operating system that uses that memory to its fullest. So, be sure to match speed.

You also need to check if the SIMMs are seated firmly in the sockets. It is not hard to install RAM but it has to be done properly. If the TRAP error still occurs, you most likely have bad memory. Use the process of elimination to figure out which SIMM is bad.

TRAP 0D, the most common trap you will see, is a general protection error. When a program tries to access memory that was not its to use, OS/2 will catch the problem before corruption can take place. If this was caused by a software application, you might try reinstalling the software. This sometimes corrects the problem. *[Well, rarely. —Ed.]*

A TRAP 0E is called a page fault. This happens when an attempt is made to access a page of virtual memory that was not in RAM. Actually, page faults occur internally all the time with OS/2 but the OS/2 page manager intercepts the trap, retrieves the page from the SWAP-*PER.DAT* file, and loads it into

RAM. When the TRAP 0E error message appears, the page manager was unable to do its job. It's usually related to hardware bus conflicts or bad RAM.

TRAP 0C, Stack Exception, is caused by putting too much information on the stack or taking too much information off the stack. It was more common in the OS/2 2.x days; in any case, a TRAP 0C is usually caused by a problem with a device driver.

## Less common errors

Other TRAP error messages exist as well. The chances of encountering them are much less likely than those previously mentioned.

TRAP 00 is a divide by zero error, caused by an illegal mathematical operation due to a software bug.

TRAP 01 should not be encountered by the normal user. This is a debugging error called Single Step.

TRAP 03, Breakpoint, is a debugging instruction in the program that stops the computer so the programmer can see what is going on. The standard version of OS/2 will terminate an application if a breakpoint is executed. It's possible but rare that the programmer may accidentally leave in debugging code.

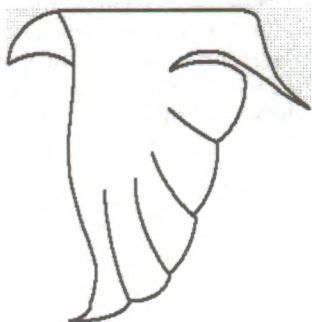
TRAP 04, Overflow Check, is used to determine if the results of a mathematical operation on signed numbers will be too large to be represented.

TRAP 05, Bounds Check, checks to be sure an index is within a specified range.

TRAP 06 is an Illegal Instruction error. You will get this if a DOS or Windows program tries to execute protected mode instructions that OS/2 does not allow because it would jeopardize system integrity.

TRAP 07, Device Not Available, is used for floating-point instructions on systems without a Floating Point Unit. (This is a holdover from OS/2 1.x, since OS/2 2.0 and above require an 80386 or above—which includes the math chip.)





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## *.building blocks (cont)*

TRAP 08, Double Fault, occurs when a trap is generated by a trap handler. This usually happens when a program uses all the stack space in RAM in the area where temporary data is stored. OS/2's trap handler takes over when the stack area is overrun but since it needs some of the stack space, a double fault occurs.

TRAP 0A is caused by a task switch to a segment with an invalid Task State Segment.

TRAP 0B, Segment not Present, is the 16-bit version of TRAP 0E.

TRAP 10 occurs when an error is detected in a floating-point instruction.

TRAP 11, Alignment Check, occurs when data is not properly aligned in RAM. Some instructions require that an operand is stored in an address that is evenly divisible by 2 or 4.

### **A little knowledge**

As you can see, most TRAPs will never be encountered by the normal user. (You abnormal users had better watch out, though.)

Hopefully, if you do get a TRAP error, you'll be able to figure out

what caused it and remedy the situation. I'm sure no one wants error messages but when they show up before more damage is done, they can be a good thing. ☺

## *.lastmonth (cont)*

fledged OS/2 applications, and emulators tend to be poor performers.

As mentioned earlier, this product shares a common code base with the Windows version, but that doesn't make this a simple port of that product. Lotus' intention was to make the user interface common between applications and across platforms, including sharing files to the greatest extent possible. This also required reverse engineering a subset of OLE, because when Lotus approached Microsoft about licensing the technology, they wanted \$50 per copy. Unfortunately, this is a case where a superior OS/2 facility had to give way to an inferior one to achieve the least common denominator necessary for duplicate functionality. Michael pointed out that this is not a complete implementation of OLE, but I don't think anyone in the OS/2 community cares much anyway, unless they want to develop a multi-platform application.

### **What's in it?**

The new SmartSuite consists of Approach and Organizer (for which this is the first OS/2 implementa-

tion), plus WordPro and Freelance (which were upgraded from the SmartSuite 96 versions). It also includes a completely redeveloped Lotus 1-2-3, which is a 32-bit OS/2 application for the first time.

Lotus wanted to make it clear that a full-time team is working in the product and that it's not a part-time effort or something that was done in their spare time. The product has over one hundred developers worldwide, with Approach developed in Mountain View, CA; WordPro in Atlanta; Organizer, 1-2-3, and Freelance in Cambridge, MA. The Open32 and OS/2 work were done at the IBM facilities in Endicott, NY and Austin, TX. The international implementations are developed in Dublin, Ireland.

Aside from the common interfaces and functionality mentioned earlier, this version includes several groupware features, a type of functionality that is not mentioned much these days, but still in demand in large or complex organizations. By name, these are:

Team Mail: Mail that can be developed jointly by members of a group.

Team Revision and Team Consolidate: The ability to independently work on parts of a document, then consolidate them into one.

Team Security: Control of permissions to perform certain functions on a document or object, such as changing a component or printing all or part of a document.

Team Show: Remote display of presentations across a network. Internet support is also provided such as storage and retrieval of documents or objects in HTML form.

As usual, I'll spare you the blow-by-blow on the presentation. If you want a good look, get a copy of Beta 2 from one of the sources mentioned previously. Several were given away as door prizes. I've got one that I need to install, but I want to avoid any conflict with SmartSuite 96. Maybe I'll just wait to see what the production upgrade is like. It's just a matter of time, and all I need is more time. ☺



# review Links OS/2

by Elliot Abramowitz

Links OS/2  
Stardock

Software Requirements:  
OS/2 Warp 3.0 or later  
MMPM Support  
SVGA (DIVE) supported  
graphics adapter, 256 colors  
Double speed CD-ROM or  
faster  
486DX4 /75 or Faster CPU  
16MB of RAM  
Mouse

Test Machine:  
Pentium 100 Clone  
32MB of RAM  
NEC 4x CD ROM (SCSI)  
Warp Server  
ATI XL Express Video Card  
Sound Blaster AWE32

Links OS/2 is the result of a collaboration between Access Software and Stardock Systems working together to bring the most popular golf simulator into the OS/2 environment. Links OS/2 takes advantage of its graphical user interface, DIVE, and DART to bring excellent graphics, ease of use and sound to this classic game. In addition, courses that have been created for Microsoft Golf and Links 386 (.CRH) are fully compatible with the program.

The installation process is a great test program for your system. The first thing it detected was that my video driver was not setup correctly for SVGA; after informing me, it shut down. It had been so long since I installed the system I forgot about that completely. The second error during installation resulted in a SYS3175 error giving me an opportunity to contact Stardock's tech support via email.

Within a day, I was informed that there was a fix pack out for Links, and advised to download it from the Stardock Web site. After doing so, the install went smoothly.

## Swinging into things

When you start Links, you are presented with several choices: New game, Quick start, Practice, and Resume game.

Practice, as you might suspect, places you at the main practice hole located at #12. This option gives you an opportunity to practice the whole course or at various holes located around the course.

You can use existing players or create new ones for the game. Links is very good at customizing new players. Several options are available in configuring players so you can change the players gender, skin and hair color, color of shirt, and skill level, among other items.

I'd suggest playing this on a large monitor. On a 14" monitor, the screen gets to be a bit crowded. Once you decide to play a practice round or a regular game, eight windows appear on the screen. Five of the windows can be minimized

including Top View, Green, Profile, Advanced Shot Setup, and Scorecard. The three views which stay up all the time are the main view, info, and swing windows.

The Info Screen gives details on your current shot: hole number, par information, wind direction and speed, and number of shots taken.



The Green window gives you an aerial or high view of the hole approach. Top view shows an aerial view of the entire course, with several levels of magnification available. This view allows you to see what obstacles lie in wait.

Advanced Shot Setup allows you to set up your shot in much greater detail. Here you can adjust the ball position, and adjust the club face and swing plane. Until you become very good in the game, I'd suggest that you leave this area alone! My straight shots suddenly decided to veer all over the place after I tried this out.

The Main and Swing Windows are where most of the action takes place during the game. Here you view the course as a player sees it as they tee up, and the Swing Window controls how hard you hit the ball and how much slice you put on it. After the ball is in play, the post shot window comes up with various choices, ranging from viewing the shot from a different angle to just replaying the shot—praise the programmer for that feature! The

details are crisp and smooth, just what you would expect in such a game.

Sound effects throughout bring a more realistic feel to the game. You can hear the golf club swing as well as hear various sound effects that you normally expect at a golf match. These can be turned on or off as you prefer.

## Software divots

The game does have several minor drawbacks. Compared to its DOS/Windows counterpart, the documentation is sorely lacking. In Links for MS-DOS, the manual not

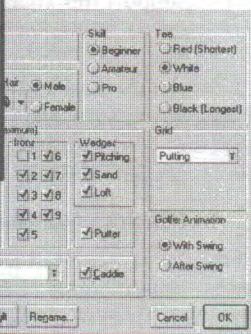
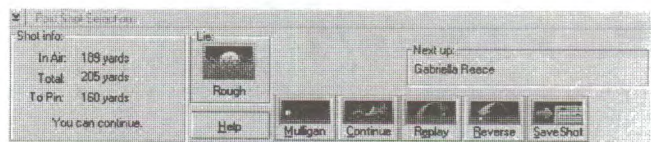
only covers the basic installation but goes on to explain the various player levels (there is a difference in play style), the best way to swing using the

mouse button, and more detail on aiming a shot among other items. Considering that the product came from both Access and (more importantly) Stardock, I feel that a better job in this area could have been accomplished.

Links for OS/2 runs much faster than does its DOS sibling. On the other hand, it is *very* disk intensive when you go to close the program. Even on a fast SCSI system, you can hear the drive continue to crunch long after you close the program.

## A winning combination

Overall, even with its few flaws, Links OS/2 is an excellent program especially for those armchair golfers that wish to practice golf without the expense of green fees, travel expenses, and caddie fees. It's a good addition to your games collection unless you are only into the faster action shoot-'em-up games or strategy games. (U)





# review Back Again/2

by Chuck McKinnis

Back Again/2 from Computer Data Strategies (CDS) has been my backup software of choice for about six months. I first installed it as a part of Stardock's Object Desktop Professional and later upgraded to the CDS Back Again/2 Professional Edition. For the two years previous, I had used an old version of IBM's DualStor with its accompanying DualStor 250 tape drive. I have also used the tape backup software shipped with Warp Server, called Personally Safe and Sound.

If you want tape backup software that supports tape drives attached to a floppy controller, don't read any further. None of the BA/2 products support this attachment. CDS claims that tapes attached through the floppy controller are not sufficiently reliable to be used as backup devices. (In two years, I never experienced a problem with my old IBM DualStor setup).

## Product versions

BA/2 comes in three flavors (or four, if you count the one supplied as a part of Object Desktop Professional). All are 32-bit applications with graphic and command line interfaces, are multithreaded, have full WPS integration, provide a standalone disaster recovery facility, and provide network support. The major difference is the backup device support.

The Personal Edition supports local hard drives supported by OS/2, LAN attached hard drives (via drive letter and UNC), and removable disk drives (including diskettes, removable cartridge drives, Iomega drives, Syquest drives, and magneto-optical disks).

The special edition (included with Object Desktop Professional) adds device support for ATAPI/IDE tape drives.

The Professional Edition (list price \$149) adds device support for SCSI attached tape devices.

The Enterprise Edition (\$299) also has device support for SCSI attached automated tape changers and libraries.

## Getting started

After my initial installation, the only backup device I had was a large IDE hard drive, and it worked quite well. Considering the current cost of large capacity hard drives, this is not a bad choice if your system has the physical space and IDE connection available.

However, my old mainframe heritage made me long for a real backup to removable tape, and I first installed the BA/2 Professional Edition to support a Conner SCSI mini-cartridge drive. I now have an Archive Python 4mm SCSI tape drive with an autoloader. Although my level of BA/2 does not directly support the autoloader feature, I don't feel that I can justify the additional cost of the Enterprise Edition at this time. The tape control window does allow me to manually switch tapes in the autoloader.

Installation is simple. BA/2 makes only one application entry in OS2.INI and does not install anything into the OS/2 libraries. The device driver supplied by CDS interfaces with the OS/2 standard OS2SCSI.DMD base device driver.

## Operations

BA/2 operation is fairly simple. Backup definitions are made and saved as sets. Automatic scheduling is defined in the BA/2 setup and implemented by shadowing the BA/2 object to the scheduling folder. Scheduled backups can be defined as unattended.

I currently use three tapes in my backup rotation. Once a week I backup everything and reset the archive bits. Daily, I backup all changed files. My weekly backup sets are saved with the same name as the tape serial number in order to know what is on each tape and get a separate catalog for each tape. The daily backups are appended to the end of the current weekly tape. My weekly backup is about 2 GB and takes about an hour. My daily backups vary in size, but are typically 100-500 MB and take 5-15 minutes.

I did find a few deficiencies. The scheduler does not seem to want to launch objects unless it is open. This issue was reported to CDS, and opening the scheduler folder minimized in the Startup Folder was the workaround. The problem may have been aggravated by Object Desktop Professional, which also has a version of the BA/2 scheduler. The Object Desktop scheduler works fine without being opened, so that is my current solution.

BA/2 does not maintain an inventory of physical tapes as did DualStor. You must physically load a tape and open the tape control panel to see what the tape contains.

I have only had to contact CDS on two occasions. The first was concerning the behavior of the scheduler, and the second was to report a problem with opening the tape control window after the application of Fixpack 3 to Warp 4. Both issues were dealt with in a professional manner.

## Sources and pricing

BA/2 is available from a variety of re-sellers worldwide. Be aware that editions available from the various resellers vary. The competitive upgrades appear to be available only from CDS.

CDS has an evaluation copy (5 MB maximum backup capacity) available for download.

## Summary

Even with its deficiencies, BA/2 is one of the best tape backup packages available for OS/2. If your backup media of choice is a hard drive or removable drive, \$34 for the Personal Edition is a good value. The Professional Edition is a little high priced but was still worth the money to me. The supplied help and INF files, along with the design of the PM interface make the hard copy documentation a matter of personal preference (though not mine). The Enterprise Edition is overpriced for the home or SOHO user (even though I would love to have full support for my autoloader). ☺

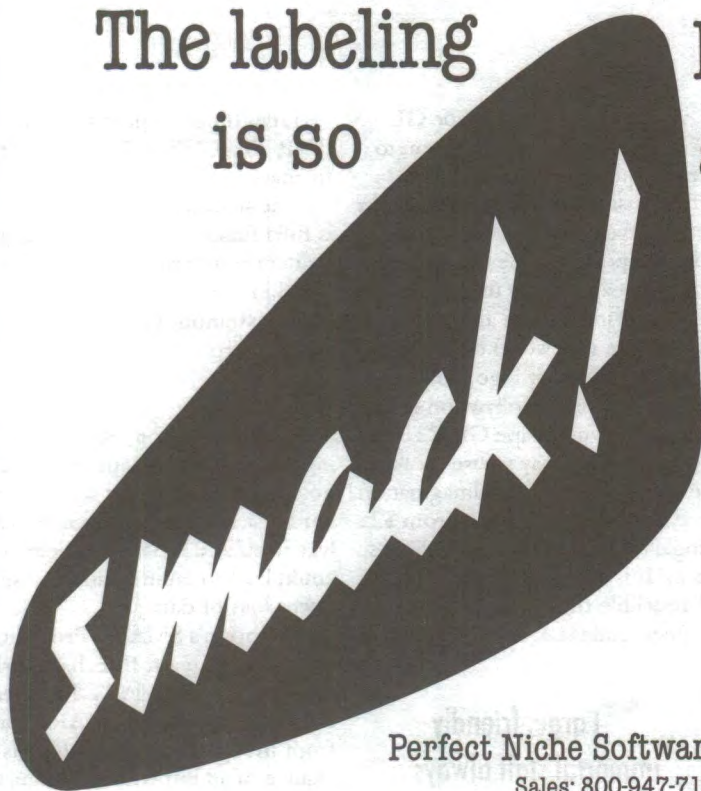
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Computer Data Strategies  
[www.cds-inc.com](http://www.cds-inc.com)

Chuck retired from IBM as a Senior Systems Specialist with over 30 years experience in large IBM mainframes and has been an OS/2 user for the past seven years. He currently does occasional contract systems work through Denver Solutions Group (an IBM Business Partner), is a member of IBM BESTeam, POSSI, and Secretary of the OS/2 Users Group of New Mexico. He can be contacted at [mckinnis@ibm.net](mailto:mckinnis@ibm.net).



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# random bits New and improved

compiled by Esther Schindler

Sometimes, I try to summarize the various new and updated applications whose announcements find their way into my in-box. I don't think it's possible to do so, this month. With a VRML screen saver, a fantasy role playing game, and a vector drawing tool in this month's mix, what attributes could I say these applications share? The only commonality is that their authors are doing their best to serve the OS/2 community. Perhaps you'll find some of them worth pursuing. (If you do, and you're interested in reviewing one for *extended attributes*, be sure to send an email to the reviews editor!)

## Escape GL 2.0

Snow Storm Software's new Escape GL 2.0 incorporates OpenGL 3D modules, textures, VRML V2.0 support, and a powerful developers kit. Escape GL V2.0 is OS/2 Warp's Hottest 3D OpenGL Screen Saver.

New features include:

**New OpenGL modules.** Now there's over 35 animated effects for you to enjoy, incorporating cutting edge technology including transparency effects, animated turbulence, and texture mapping. Sit by the campfire, drift across the ocean, or ride a raging roller coaster. Those are just three of the fabulous new displays that are waiting for you.

**Texture mapping.** Many of Escape GL V2.0's new modules incorporate full texture mapping, enabling you to display your favorite image on a 3D model. Choose from PhotoCDs, your favorite JPEGs, or the hottest images from the Internet. Plaster them on a Texture Cube, the Magic Carpet, or reflect it off of a shiny cube, all in 3D!

Escape GL V2.0 adds support for VRML V2.0 Worlds, including texturing, animations, viewpoints, inlining, full lighting, extrusions, and more. Now bunnies, monster trucks, virtual parks, fighter jets, or even haunted houses are within easy reach. Experience the included VRML V2.0 models or browse the web for some of the thousands available.

**Developer's toolkits.** Escape GL V2.0 has multiple ways for you to create your own animated 3D effects, using a C Developers Kit, a C++ Developers Kit, and VRML V2.0 support. Escape GL V2.0 is infinitely expandable to allow developers and individuals alike to explore the vast world of 3D. Convert your company logo, house plans, or favorite Hollywood effect into your own Escape GL V2.0 module. These easy to use toolkits are limited only by your imagination.

Escape GL V2.0 costs from \$25 (single user) to \$750 (50 user license pack). It is available from:

○ Indelible Blue

([www.indelible-blue.com](http://www.indelible-blue.com))

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○ Multitask Consulting

([www.multitask.com.au](http://www.multitask.com.au))

○ Snow Storm Software

([www.pacificablue.com/sss](http://www.pacificablue.com/sss))

## PMdiff 4.0c

Araxis Ltd ([www.araxis.com](http://www.araxis.com)) announced an update to its popular visual side-by-side file comparison and merging application.

PMdiff 4.0c for OS/2 is available from the Araxis Web site to registered users of PMdiff 4.0, 4.0a, and 4.0b. Araxis also announced PMdiff 4.6 for Windows 95 and Windows NT 4.0.

## DrawIt

DrawIt is a vector oriented drawing tool written for OS/2 Warp. It has all the features you'd expect in a paint brush type program, plus a lot of nifty features such as balloon help creation.

DrawIt can import PCX, GIF, BMP, TIFF, XBM, Targa, and PIC formats.

The shareware version of DrawIt is fully functional, with the single limitation that projects can only be saved in OS/2 metafile format.

Registration: \$25. Available at BMT Micro.

## SMART Pro

SMART stands for “Self Monitoring, Analysis, and Reporting Technology.” It is a system whereby the hard disk has the intelligence to analyze itself and report problems that could lead to failure and a subsequent loss of data.

Quantum's SMART Pro enables the technology on IDE hard disks that support it. SMART Pro then requests the current SMART status from the hard disk(s). If there is a chance of an impending failure, it is reported. You are encouraged to back up your data, and perhaps seek a professional's advice on what to do next: replace or repair the hard disk. All this happens before the operating system loads.

In today's 32-bit world, operating systems write data to the hard disk as they load. If there is a problem with the hard disk, sensitive data risks being overwritten before you have the opportunity to back it up.

SMART Pro installs itself in the MBR (Master Boot Record) of your hard disk. It is not compatible with other MBR programs from other software companies except Disk Manager. If you are using EZ-Drive, Bluesky Innovations LLC proposes an alternative called Power Bios Lite that works for large hard drives and is compatible with SMART Pro. If you wish to boot multiple operating systems, Power Boot is also available.

More information can be found at [www.quantum.com/src/whitepapers/smart/contents.html](http://www.quantum.com/src/whitepapers/smart/contents.html)

Registration: \$15; available at BMT Micro.



## Dialog Enhancer

Dialog Enhancer transforms the look of your OS/2 Warp 4.0 system by updating the system dialog boxes, icons, and utility programs.

With Dialog Enhancer, your desktop will finally look complete. Dialog Enhancer banishes the old System Proportional font, and introduces the WarpSans font throughout the system. Graphics are updated, dialog footprints reduced, and text and icons added throughout to further improve system visuals and understanding. The new look is addictive and pleasing to the eye.

Dialog Enhancer is fully integrated into the desktop, so operation is seamless alongside the Workplace Shell. Unlike many other enhancements, there is no modification of program executables or hidden background processes to reduce the performance of your system. A simple install is all that is required to give your system a new lease on life.

Registration: \$15. Available at BMT Micro.

## NetLookout 2.0

NetLookout watches Web, FTP, and Gopher sites, and notifies you if something has changed. You can specify how often you want a site to be checked, what to ignore when checking a site, and how you want to be notified when a site changes.

Version 2.0 introduces some big improvements over 1.0:

- Much-improved user interface
- HTTP proxy support, including user name and password
- Drag'n'drop support for creating new Lookouts
- Import Lookouts from a number of popular OS/2 and Windows Internet applications.

Registration: \$20. Available at BMT Micro.

## Realms of Mituen

The Realms of Mituen is a free fantasy role playing game.

It's great for beginners or pro's. The game is lag free, with an easy to use interpreter.

It takes place in a huge world, skillfully written, with lots of detail, original hometowns, and an extensive clan system.

- Limited PKill (Pay Gold to be a PKILLer *only* if you want to). If you never want to be killed, you won't!
- 50 levels of well balanced gameplay.
- Large, friendly immortal staff always looking for new ideas.
- Friendly player base. Lots of good roleplaying.
- Leveling requires skill, not friends. (Although friends do help.)
- Ansi color.
- Fast, lag free site.
- Intelligent monsters with automated quests
- Over thirty intelligent Immortals with non-automated quests.
- Over 130 zones, with new ones being added constantly.
- There will *never* be a player wipe!

This is an exceptional multiuser dungeon (MUD), with exceptional people, and you're invited to visit.

You can get The Realms of Mituen by telnetting to `mordor.os2bbs.com 4000`, or on the Web at `www.os2bbs.com/mordor`.

## Internet Gate 1.3

MaccaSoft Development announced that Internet Gate version 1.30 was released.

Internet Gate allows multiple users simultaneous access to the Internet with only one connection of nearly any type (modem, ISDN, leased line, etc.). Internet Gate runs on a single OS/2 Warp, Windows 95, or Windows NT computer, which does not have to be "dedicated" to the task. Internet Gate 1.30 can share a single Internet connection with nearly any type of client computer running TCP/IP. It shares access with such popular applications as Netscape Navigator, MS Internet Explorer, Eudora, Netscape Mail, popular telnet and FTP programs, and many, many more.

Internet Gate is the perfect solution for anyone seeking to share Internet access with other machines in nearly any environment, from a small home office sharing a single modem to a large and complex network sharing an ISDN or leased circuit. Internet Gate even acts as a powerful firewall, controlling access

both to and from your valuable internal network.

This new version comes with the following enhancements and additions:

- Support for the RealAudio protocol, allowing RealAudio clients to operate fully.
- Direct proxy support for VDO-Live conferencing.
- Enhanced security rules allows to define permissions for each proxy service.
- Proxy service logging.
- Improved compatibility with Netscape Mail shipped with Netscape Communicator 4.xx.

For more information and to download a free trial version visit `www.maccasoft.com`.

## think::xels!

think::xels! is a collection of over 1,200 high quality symbols designed for OS/2. All symbols are well sorted, newly designed, and never seen on OS/2. They also support animation and state changing.

Every icon comes in various designs for supporting state changing like locking a file, create, open, save a file and much more. All symbols use the same "super palette" of fifteen colors and supports low- and high-color systems. They also support screen resolutions from VGA up to XGA and SVGA.

Use think::xels! to replace your icons for various file types, sounds, folders, multimedia, drives, sources and much more, to give your system a better look and feel.

As a developer, use think::xels! to make your application more human readable. As an Network Administrator use think::xels! to set up an attractive and homogeneous environment.

Read more about think::xels! at `www.thinknow.com`. The software is also available at BMT Micro. ☺



# Review Neon 2D Grafix

by Gwen Veneskey

Neon 2D Vector Grafix  
www.neongrafix.com  
List price: \$129

System requirements:  
OS/2 Warp 3 or 4  
Fixpack recommended  
8 MB of hard disk space  
8 MB of RAM  
16-bit or 24-bit video graph-  
ics card recommended

If you are looking for an OS/2 replacement for CorelDRAW!, your search may be over. Neon 2D Vector Grafix, recently released by the developers of Neon Object and Neon Scene, is more than a contender.

For several years now, we have been looking for an OS/2 graphics package with all of the functionality of CorelDRAW! Believe me, we have looked at *everything* that has come down the pike. Many of the packages have filled a niche of one kind or another. One was very nice for screen capturing, another was great at photo editing, still another was an excellent tool for 3D and animation. But none, until now, was quite enough to make us put CorelDRAW! on the shelf.

And I really wanted to do so; Corel refused to listen to its OS/2 users and upgrade its OS/2 software since version 2.5. We bought the Windows versions of CorelDRAW, but stopped upgrading when the company released its Windows 95 version.

## What's hot

Neon 2D Vector Grafix is, as its name implies, a vector graphics package. Vector graphics, as opposed to bitmap graphics which use pixels, resize extremely well; they don't give you those jagged edges. It is also much easier to draw "freehand" using vector-based software because instead of working with pixels, you work with lines, curves, and points.

I had gotten used to the advantages of vector drawing with CorelDRAW! Until Neon 2D came along, we couldn't find a native OS/2 vector draw package. Happily, Neon 2D has everything we have been unwilling to give up. Plus, it includes a few little gems that I'm not even sure Corel has!

You can draw, size, and scale. You can single or multiple copy. You can order; you can rotate, skew, mirror vertically or horizontally. You can group, you can move points, you can layer, and you can run text along a path. You can run text along a

path; Corel has this feature too, but it's easier to use in Neon 2D. Melting paths is a useful capability to make holes like the cut-out in the letter "A."

I wouldn't want to give up Neon 2D's Interpolate feature. Create a shape, such as a cylinder, by drawing two circles and then using the "extrude" tool. I rarely use extrude since I also have Neon Object, but this provides a way to give the drawing dimension or create a 3D effect. You can choose to have one color overlap another, cover (replace), show through (transparency), or create a third color (change). You can make files with multiple pages. Undos are only limited by available memory; you don't have to set up a number of Undos first.

Neon 2D includes the expected grids, guides, lock group, invert colors, mask foreground objects, and several supported import/export formats. Vertex and bezier curve manipulation is standard with any vector package. Zooms are controllable; you aren't limited to stock sizes. The Apply feature lets you test changes without leaving the dialog box so you can see if the changes are really what you want.

Neon 2D is customizable; you can configure the menu structures and define your own toolbars. The tools you rarely use won't clutter up your work area, leaving those you do use available. If you want to close your file without saving it, you can choose "Abandon Changes;" this saves you going through that extra step of closing the "Do you want to Save?" pop-up window.

Best of all, you are not stuck with a proprietary format that no other package can use, which consumes oodles of disk space. I made an identical text-to-path graphic in Neon 2D and in CorelDraw. The 2D version was 2603 bytes; the CorelDraw version was 12770 bytes. With more complex drawings, the size factor is even more noticeable.

I have to admit that I was a bit skeptical; there are only two small manuals (and online help). But this product is loaded with features.

Granted, Neon 2D doesn't come with loads of clipart and add-on packages that don't work, that you probably wouldn't ever use if they did. But it's native OS/2 software, it's filled with features, and it's reasonably priced.

## What's not


I do have one gripe: The translation from the native German manual, at times, leaves a bit to be desired. Scherwinkel? No, that is not a misprint. Or how about, "Is a graphic object already selected and was until now the points-creating-tool selected and there on the other hand either a point, which does not connect two lines or one line by itself, so that will be not created a new object, but the selected object will be completed." Well, who reads manuals anyway?

Once you figure it out, 2D interfaces nicely with Neon Grafix 3D if you want to do animation. The process is a bit tricky; you must save the file as a SHP format, then edit the SHP in Neon Object. You can only load a SHP into the "Spin" or "Extrude" windows in Neon Object. After editing, the shape must be saved as a BDY so that it can be used in Neon Scene.

After some pretty extensive testing, I've concluded this product has promise, even though it is not 100% stable. It is rare to find perfect software these days. I did find some bugs which crashed the system, but I suppose we're all used to doing frequent saves and backups from using our Windows software. The bugs were reported to Compo, as well as a few other minor glitches and a feature request or two. For instance, I'd like to be able to use the arrow keys to move an object. One real plus is Compo's e-mail support, which is quite responsive.

This is one fine package, well worth taking a look at. Move over, Corel. ☺





# One bad software decision can ruin your whole day.

Let's face it . When it comes to choosing the right utilities for your OS/2 system, you can't afford to take risks. You need a proven set of disk, file, and desktop utilities which are reliable and effective. One that supports multi-gigabyte partitions, HPFS and FAT file formats, long file names, with both PM and command line utilities. With qualified product support representatives accessible from the internet, compuserve, phone or fax.

What you need is the SofTouch Suite family of OS/2<sup>®</sup> utilities from SofTouch Systems, Inc. Our disk and file utilities improve system performance with HPFS and FAT defraggers, repair damaged INI files and user desktops, fully uninstall applications, move applications across different partitions and manage hundreds of thousands of files in directories and drives spanning multiple gigabytes of space. Our software repairs damaged partitions, rebuilds corrupted desktops, and recovers critical HPFS data files - everything you need to maintain your custom OS/2 system.

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# OS/2 BBS top ten downloads

Here's the top downloads for the last 90 days on the OS/2 BBS, ending February 7, 1998:

**UNZ532X2.EXE:** 232K, 11-09-97

Info-ZIP UNZIP v5.32 32-bit OS/2 binaries.

**OMNI532.ZIP:** 278K, 12-30-97

OMNI printer driver (many new models). OS/2 Warp 3.x / 4.x OMNI printer driver v30.517 for HP, Epson, Canon, and some others.

**ZIP22X2.ZIP:** 139K, 11-09-97

Info-ZIP ZIP v2.2 32-bit OS/2 binaries.

**XR\_M005.RM2:** 45K, 11-20-97

Warp 4 FixPak 5 APAR listing

**ZOC307.ZIP:** 812K, 12-27-97

Emtec's ZOC (V3.07-OS2) Communications Program for OS/2 v3.07

**XR\_M005.RM1:** 79K, 11-20-97

Warp 4 FixPak 5  
Readme and Installation Instructions  
**IHPFS126.ZIP:**

56K, 12-02-97

HPFS driver for  
DOS, v1.26.

**XR\_M005.1DK:**

1373K, 11-20-97

Warp 4 FixPak 5  
Diskette 1

**XR\_M005.2DK:** 1438K, 11-20-97

Warp 4 FixPak 5 Diskette 2

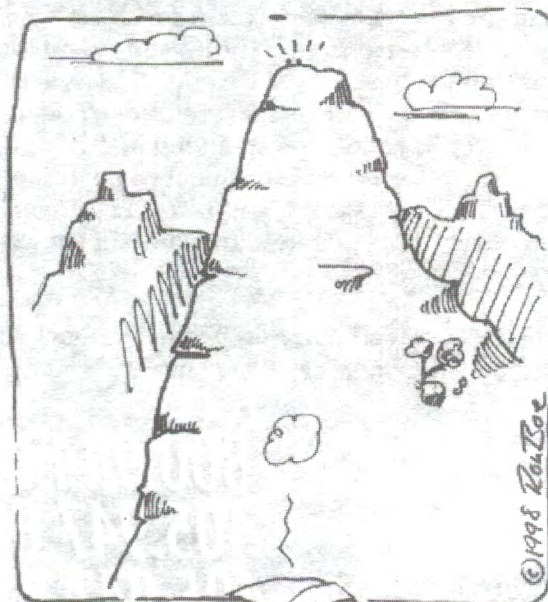
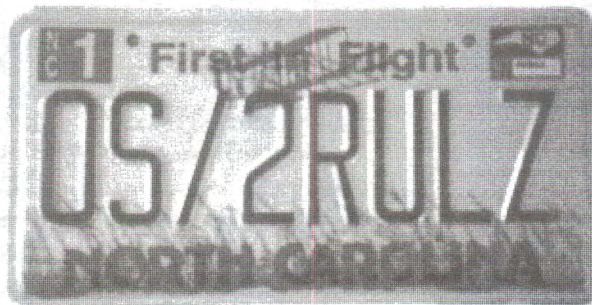
**XR\_M005.REG:** 12K, 11-20-97

Warp 4 FixPak 5 readme file for REGEDIT2,  
Warp's new Registry Editor for Open 32.

Pete Norloff's OS/2 Shareware BBS contains a comprehensive collection of OS/2 programs and information. All the latest operating system patches from IBM as well as freeware and shareware programs from around the globe may be downloaded from the BBS 24 hours a day. The system is connected to five computer networks offering conference areas on a large variety of OS/2 topics. The BBS can be accessed both through dialup lines and through telnet connections over the Internet. For subscribers, the entire file collection is also available through the Web.

Daily and weekly new file announcements are available via email. For details, see [www.os2bbs.com/docs/lists.html](http://www.os2bbs.com/docs/lists.html)

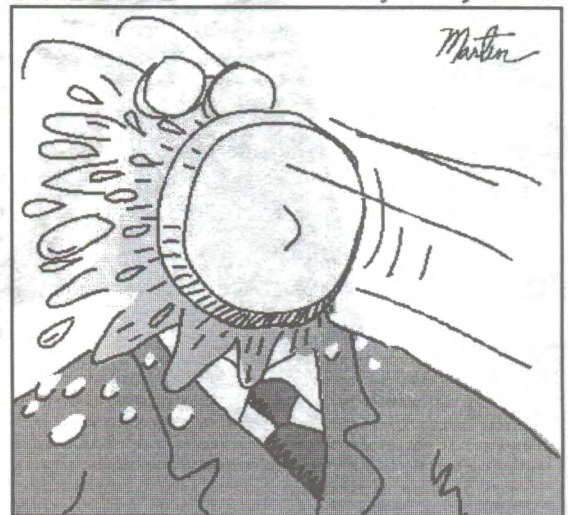
The BBS is available via telnet sessions to <tel://bbs.os2bbs.com>, direct dial to 703-242-4480, and via the Web at [www.os2bbs.com](http://www.os2bbs.com). ☺



I WONDER IF BOB SEES THE  
IRONY IN THIS. HE ALWAYS SAID  
TO BACKUP AS OFTEN AS POSSIBLE!

## OS/2oons

by Harry Martin

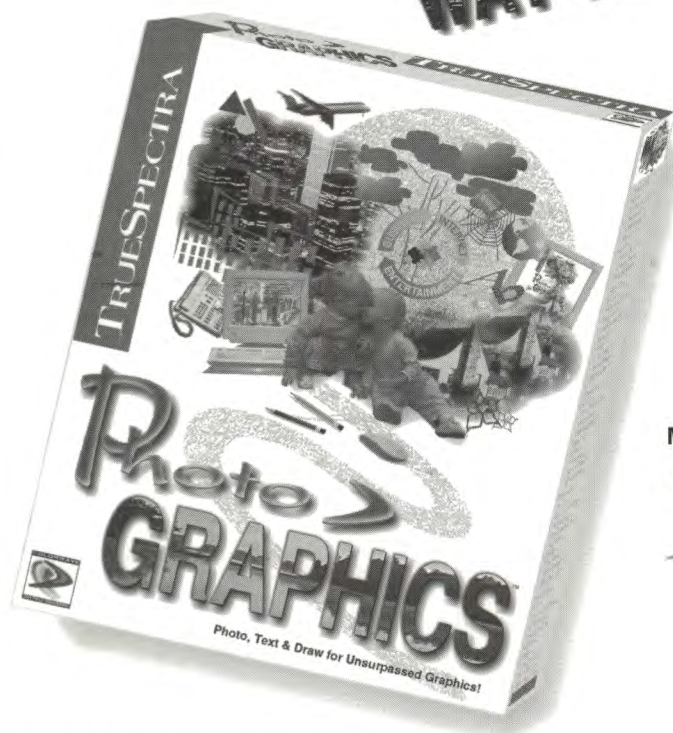


Bill Gates samples Belgium pie



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## The Phoenix OS/2 Society, Inc

The Phoenix OS/2 Society is a computer user group dedicated to OS/2. We have been publishing our award-winning magazine, *extended attributes* since August of 1994, and we have members all over the world.

Yes, this is a user group publication, and that sometimes shows; however, that's also an advantage, since you get real-world feedback about OS/2 and OS/2 products from other users, not just jaded, cynical journalists.

How useful will it be to join the Phoenix OS/2 Society if you aren't in Arizona? We see the Phoenix OS/2 Society as something akin to the National Geographic Society or the Smithsonian; while most members only see a magazine, you're actually a member of a society, and can participate in its activities when you happen to be in the area.

Even without activities that take place in Phoenix, Society membership includes product discounts that alone could make membership worthwhile. Taking advantage of one such discount could easily save you the entire cost of membership, giving you a "free" subscription.

Plus, the Society is prominent in the computing community. We are *already* heard by IBM; they listen to what we say. Several IBM executives get *extended attributes*. They don't get it for the "club news"—they use it to learn what OS/2 users really care about. And they respond to what they read.

You're not just getting a magazine. You're getting a voice.

If you would like to continue to receive the magazine, fill out the membership card in the center



## Invites you to join



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